Chapter 4

State(s): Montana and Idaho

Recovery Unit Name: Kootenai River

Region 1
U S Fish and Wildlife Service
Portland, Oregon

DISCLAIMER PAGE

Recovery plans delineate reasonable actions that are believed necessary to recover and/or protect the species. Recovery plans are prepared by the U.S. Fish and Wildlife Service and, in this, case with the assistance of recovery unit teams, State agencies, Tribal agencies, and others. Objectives will be attained and any necessary funds made available subject to budgetary and other constraints affecting the parties involved, as well as the need to address other priorities. Recovery plans do not necessarily represent the views nor the official positions or approval of any individuals or agencies involved in the plan formulation, other than the U.S. Fish and Wildlife Service. Recovery plans represent the official position of the U.S. Fish and Wildlife Service *only* after they have been signed by the Director or Regional Director as *approved*. Approved recovery plans are subject to modification as dictated by new findings, changes in species status, and the completion of recovery tasks.

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EXECUTIVE SUMMARY

CURRENT SPECIES STATUS

The U.S. Fish and Wildlife Service issued a final rule listing the Columbia River population of bull trout as a threatened species on June 10, 1998 (63 FR 31647). The Kootenai River Recovery Unit forms part of the range of the Columbia River population segment. The Kootenai River Recovery Unit is unique in its international configuration, and recovery will require strong international cooperative efforts. Within the Kootenai River Recovery Unit, the historic distribution of bull trout is relatively intact. But abundance of bull trout in portions of the watershed has been reduced, and remaining populations are fragmented. The Kootenai River Recovery Unit includes 4 core areas and about 10 currently identified local populations.

HABITAT REQUIREMENTS AND LIMITING FACTORS

Libby Dam has been one of the most important factors affecting bull trout in the Kootenai River Recovery Unit. The completion of the dam in 1972 severed the migratory corridor between the upper Kootenai River watershed (Montana and British Columbia) and the lower Kootenai River basin in northern Idaho, which drains into Kootenay Lake in British Columbia. The dam blocks all upstream migration and essentially bisects the United States portion of the Kootenai River drainage into two reaches. The upstream reservoir section of Lake Koocanusa is isolated from a downstream riverine reach. The habitat in the riverine reach is dramatically altered as a result of Libby Dam and is characterized by unnatural flow patterns, water temperatures, and water quality parameters. These changes, combined with other impacts to the lower river habitat, led to chronic reproductive failure of Kootenai River white sturgeon (known to have historically inhabited the drainage only downstream of Kootenai Falls). In 1994, it was listed as an endangered species. Native burbot populations in the Kootenai River have also collapsed.

Forestry practices also rank as a high risk to bull trout in the Kootenai River Recovery Unit, largely because forestry is the dominant land use in the

basin. Virtually all drainages supporting bull trout in the Kootenai River Recovery Unit are managed timberlands. Although current forestry practices have improved, the risk is still high because of the existing road system, mixed land ownership, lingering results of past activities, and inconsistent application of best management practices.

The Kootenai River drainage has a history of mining on both sides of the international border. Libby, Montana, and many other communities in the Kootenai River valley were located at their present sites due to mining interests. Several mines have caused site-specific impacts on local populations of bull trout, but widespread negative impacts to water quality (such as those occurring in the Clark Fork Recovery Unit) due to mining have not occurred in the Kootenai River drainage. There are several active and proposed mining operations in the watershed, some of large dimension.

Fisheries management risks include poaching, introduction of nonnative species, and growing angler use of both the lake and river. Lake Koocanusa is currently the most heavily fished lake or reservoir in western Montana. Illegal harvest of bull trout has been well documented in the Kootenai River Recovery Unit and is considered a high risk because of the traditional focus on well-known and limited spawning areas. Introduced species are widespread throughout the drainage, and the proliferation of brook trout is currently thought to present the greatest nonnative species risk to bull trout, because of the threat of hybridization. Angler misidentification of species and incidental take by anglers due to hooking mortality is a growing concern.

RECOVERY OBJECTIVES

The goal of the Bull Trout Recovery Plan is to **ensure the long-term persistence of self-sustaining, complex, interacting groups of bull trout distributed across the species native range, so that the species can be delisted**. Specifically, the Kootenai River Recovery Unit Team adopted the goal of a **net increase in bull trout abundance in this recovery unit (as measured by standards the recovery team develops), with restored distribution of any extirpated populations that the recovery unit team identifies as necessary to recovery.**

RECOVERY CRITERIA

In order to assess progress toward the Kootenai River Recovery Unit objective, the recovery unit team adopted the following recovery criteria. The assumption was made that no core area is viable with a population of less than 100 adults because of the inherent stochastic and genetic risks associated with populations lower than that. The recovery criteria are applied on a core area-by-core area basis.

In this recovery unit, a distinction has been made between two types of core areas—primary and secondary—based mostly on the size, connectedness, and complexity of the watershed and the degree of natural population isolation. Lake Koocanusa and the Kootenai River/Kootenay Lake complex downstream of Libby Dam are the two primary core areas. Bull Lake and Sophie Lake are the two secondary core areas.

1. **Distribution criteria will be met when the total number of identified local populations (currently numbering 10 in United States waters) has been maintained or increased, and local populations remain broadly distributed in all 4 existing core areas**.

2. **Abundance criteria will be met when the primary Lake Koocanusa and Kootenai River/Kootenay Lake core areas are each documented to host at least 5 local populations (including British Columbia**

tributaries) with 100 adults in each, and each of these primary core areas contains at least 1,000 adult bull trout.

The abundance criteria for the Bull Lake and Sophie Lake secondary core areas will be met when each core area supports at least 1 local population of bull trout containing 100 or more adult fish.

3. **Trend criteria will be met when the overall bull trout population in the Kootenai River Recovery Unit is accepted, under contemporary standards of the time, as stable or increasing, based on at least 10 years of monitoring data**.

4. **Connectivity criteria will be met when dam operational issues are satisfactorily addressed at Libby Dam (as identified through U.S. Fish and Wildlife Service Biological Opinions) and when over half of the existing passage barriers identified as inhibiting bull trout migration on smaller streams within the Kootenai River Recovery Unit have been remedied.**

ACTIONS NEEDED

Recovery for bull trout will entail reducing threats to the long-term persistence of populations and their habitats, ensuring the security of multiple interacting groups of bull trout, and providing them habitat and access to conditions that allow for the expression of various life history forms. Specific tasks falling within seven categories are discussed in Chapter 1.

ESTIMATED COST OF RECOVERY

Total cost of bull trout recovery in the Kootenai River Recovery Unit is estimated at $17 million, spread over a 25-year recovery period. Total cost includes estimates of expenditures by local, Tribal, State, and Federal governments and by private business and individuals. These costs are attributed to bull trout conservation but other aquatic species will also benefit. Cost estimates are not provided for tasks which are normal agency responsibilities under existing authorities.

ESTIMATED DATE OF RECOVERY

Time required to achieve recovery depends on bull trout status, factors affecting bull trout, implementation and effectiveness of recovery tasks, and responses to recovery tasks. In the Kootenai River Recovery Unit, the current status of bull trout is better than in many other portions of the range, but a tremendous amount of work remains to be done to restore impaired habitat, reconnect habitat, and eliminate threats from nonnative species. Three to five bull trout generations (15 to 25 years), or possibly longer, may be necessary before identified threats to the species can be significantly reduced and bull trout can be considered eligible for delisting.